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67,008-073  
S-5674

**AMENDMENTS TO THE DRAWINGS:**

These drawings replace the previous filed drawings. No new matter has been added.

Figure 2 has been amended to include the faying axis P location.

Figure 6 has been amended to correct a reference numeral duplication.

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### REMARKS

Applicant wishes to thank the Examiner for the detailed remarks. Claims 1-9 and 11-13 have been amended and claims 15-21 have been canceled. New claims 22-31 are presented. Accordingly, claims 1-14 and 22-31 are pending.

Claim 12 was rejected under 35 U.S.C. §112, second paragraph. Applicant respectfully submits that the claims are in proper condition according to §112 as the zero degree fibers are longitudinal to the axis and may thereby be braided into selected areas of the sleeve - in this case along the upper and lower aerodynamic surfaces.

Claims 1, 3-7, 9-11, 13 and 15 were rejected under 35 U.S.C. §102(b) as being anticipated by *Graff* (5222297). Applicant respectfully traverses this rejection. *Graff* discloses:

To complete the manufacture of the spar, the spar sub assembly 30 is placed in a braiding machine of a commercially available type to serve as a mandrel on which a dry, *multi-layer woven fiber wrap 22* is laid up. The dry fiber wrap 22 comprises a *plurality of layers 26* of angularly woven structural fibers, such as for example IM7 brand graphite fibers from Hercules Aerospace or equivalent commercially available graphite fibers, Kevlar aramid fibers from DuPont Nemours and Company or equivalent aramid fibers, fiberglass fibers or combinations thereof, which are braided over a length of the spar subassembly from the neck down region 18 of the retention tulip 10 to the tip of the distal end of the foam core 20. A circumferential band 24 of said structural fibers *is wound* around each braided layer 26 at the neckdown region of the retention tulip 10 is ensure a high strength locking of each braided layer to the retention tulip 10.

See *Graff*, col. 5, lines 16-33; emphasis added.

As recited above, *Graff* fails to disclose or suggest a multiple of braided bias angled fibers and a multiple of zero degree fibers interwoven with said multiple of braided bias angled fibers which form a braided sleeve braided sleeve which surrounds a longitudinal axis as recited in the amended claims. In fact, *Graff* not only discloses the usage of a dry multi layer woven fiber wrap 22 but also discloses a circumferential band 24 that is *wound* about each braided layer which further substantiates that *Graff* utilizes a relatively conventional ply structure held in place by a wound band 24 of material. *Graff* simply fails to disclose or suggest any sort of braided

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sleeve as recited in the amended claims. The amended claims are properly allowable.

Claims 1-3, 5-10 and 12-15 were rejected under 35 U.S.C. §102(b) as being anticipated by *Violette* (2002/0008177; figures 1-4). Applicant respectfully traverses this rejection. *Violette* also utilizes layers of braided glass fiber material which neither discloses nor suggests the braided sleeve as recited in Applicant's amended claims. Notably, Figures 3 and 4 along with the discussion at *Violette* paragraph 20 specifically discuss the layered structure. The amended claims are properly allowable.

Claims 1, 3-7, 9-11 and 15 were rejected under 35 U.S.C. §102(b) as being anticipated by *Plummer* (4,741,087; figures 1-3). Applicant respectfully traverses this rejection. *Plummer* is directed to sleeving for a protective jacketing used with elongated objects such as conductors, cabling, cordage, or rope and as protection for delicate and finished surfaces of articles of manufacture during handling and shipping. As such, *Plummer* discloses a sleeving which is temporary in its usage. In fact, *Plummer* specifically directs that the warp filaments 14 which the Examiner interprets as zero degree fibers stretch or rupture once the sleeving has been telescoped over the object and tension is applied thereto. [See *Plummer*, col. 4, lines 19-29.]

While it is well settled that terms in a claim are to be given their broadest reasonable interpretation in proceedings before the PTO, this interpretation must be consistent with the specification, with the claim language being read in light of the specification as it would be interpreted by one of ordinary skill in the art. *In re Bond*, 910 F.2d 831, 833, 15 USPQ2d 1566, 1567 (Fed Cir. 1990); *In re Sneed*, 710 f.2d 1544, 1548, 218 USPQ 385, 388 (Fed Cir. 1983).

Here, the Examiner is suggesting an interpretation that specifically contradicts and is not consistent with the specification of *Plummer*. That is, the warp filaments 14 which the Examiner interprets as zero degree fibers cannot be properly interpreted as zero degree fibers since *Plummer* specifically teaches that the filaments 14 rupture upon installation of the sleeving material to permit the sleeving material to contract over the elongated object. The filaments 24 of *Plummer* cannot be zero degree fibers as these provide no structure whatsoever once installed and ruptured. Furthermore, once ruptured, the filaments 14 can under no just interpretation be considered as substantially parallel to a longitudinal axis as recited in Applicant's claims. The amended claims are therefore properly allowable.

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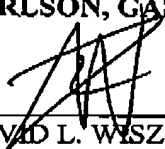
Claims 1, 4-7 and 9-11 were rejected under 35 U.S.C. §102(b) as being anticipated by *You* (5,700,533). Applicant respectfully traverses this rejection. *You* discloses a golf club shaft which is completely circular in cross-section. *You* therefore at least fails to disclose or suggest a braided sleeve with a non-circular cross-sectional profile as recited in Applicant's amended claims 1 and 9. It should be further noted that the forces exerted upon a golf club shaft are quite different than that of a rotor blade spar. The amended claims are therefore properly allowable.

New claims 22-31 recite further features of the present invention which are neither disclosed nor suggested by the cited references and are thus properly allowable. Claims 22-24 recites further features of the braided spar. Claim 25 also specifically recites an upper and lower skin which at least partially surrounds said spar to define an aerodynamic surface.

Please charge \$200 to Deposit Account No. 50-1482, in the name of Carlson, Gaskey & Olds, for 4 claims in excess of 20. If any additional fees or extensions of time are required, please charge to Deposit Account No. 50-1482.

Applicant respectfully submits that this case is in condition for allowance. If the Examiner believes that a teleconference will facilitate moving this case forward to being issued, Applicant's representative can be contacted at the number indicated below.

Respectfully Submitted,  
**CARLSON, GASKEY & OLDS, P.C.**



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